

WHAT IS CLAIMED IS:

1. A method for system design and control of a plant using a web-based system including a server and at least one device connected to the server via a network, said method comprising the steps of:

receiving application data from a user via the device;

integrating the received data into a database;

utilizing the integrated data to monitor plant activities;

collecting monitored plant activity data; and

displaying the collected data through a web interface to an appropriate person.

2. A method in accordance with Claim 1 wherein said step of receiving application data comprises the step of receiving data related to the design and operation of the plant.

3. A method in accordance with Claim 1 wherein said step of utilizing the integrated data comprises the step of utilizing a maintenance system to track and provide notices regarding maintenance.

4. A method in accordance with Claim 1 wherein said step of receiving application data comprises the steps of:

gathering engineering data and information from multiple phases of the project;

utilizing the gathered data and information to make decisions regarding the operation and maintenance of the plant; and

assessing needs and opportunities of the plant to improve the plant.

5. A method in accordance with Claim 1 wherein said step of receiving application data comprises the step of receiving application data via a network.

6. A method in accordance with Claim 5 wherein said step of receiving application data comprises the step of receiving application data via at least one of a WAN, a LAN, an intranet, and the Internet.

5 7. A method in accordance with Claim 1 wherein said step of receiving application data comprises the steps of:

receiving login information from the user;

receiving a project selection from the user; and

determining a functionality available to the user and the information the user can view based on a user level permission provided the user.

10 8. A method in accordance with Claim 1 wherein said step of displaying the collected data comprises the step of displaying a set of instrumentation and information associated with the instrumentation.

15 9. A method in accordance with Claim 1 wherein said step of receiving application data comprises the step of receiving red-lined drawings from the user.

10. A method in accordance with Claim 1 wherein said step of integrating the received data into a database comprises the step of storing project data on a server remote from the system.

20 11. A method in accordance with Claim 1 further comprising the steps of:

receiving a site administration command; and

transmitting a site administration page to the user for selection of one of an edit news block, an edit safety message block, and edit project team block, and an edit contact block.

25 12. A method in accordance with Claim 1 wherein said step of receiving application data from a user comprises the step of receiving application data from a team member.

13. A method in accordance with Claim 1 further comprises the step of creating a team member by:

creating an application user in the system; and

assigning the team member to a project.

5 14. A method in accordance with Claim 1 further comprising the step of displaying a list of project issues.

15. A method in accordance with Claim 1 wherein said step of utilizing the integrated data comprises the step of enabling the user to view a screen including each component which is to be monitored or controlled.

10 16. A method in accordance with Claim 1 wherein said step of displaying the collected data comprises the step of limiting access to the collected data in accordance with permissions given to the user.

17. A method in accordance with Claim 1 further comprising the step of enabling the user to:

15 control a monitored device; and

access information pertaining to that device.

18. A method in accordance with Claim 1 wherein said step of utilizing the integrated data comprises the step of utilizing the integrated data to monitor equipment for predictive failure, failure, and scheduled maintenance.

20 19. A method in accordance with Claim 1 wherein said step of displaying the collected data comprises the step of paging an appropriate person of a pending work order.

25 20. A method in accordance with Claim 19 wherein said step of displaying the collected data comprises the step of emailing personnel the appropriate work order to complete the job.

21. A method in accordance with Claim 19 wherein said step of paging an appropriate person comprises the steps of:

identifying at least one of an equipment failure and an equipment maintenance alarm;

identifying a piece of equipment that generated the at least one of an equipment failure and an equipment maintenance alarm;

5 identifying a person responsible for the piece of equipment; and

sending a page command to a page system so the identified person can be paged.

10 22. A method in accordance with Claim 1 wherein said step of receiving application data comprises the step of receiving information pertaining to concept, scope, pre-engineering, detailed engineering, and construction of the plant.

23. A method in accordance with Claim 1 further comprising the step of utilizing the information for designing the plant.

24. A method in accordance with Claim 1 further comprising the step of utilizing the information for operating the plant.

15 25. A system for design and control of a plant, said system comprising:

a device; and

20 a server connected to said device and configured to receive plant application information data from a user via said device, utilize the application information data to monitor plant activities, and display information obtained from monitoring the plant activities through a web interface to an appropriate person.

26. A system in accordance with Claim 25 wherein said server further configured to:

25 receive data related to the design and operation of the plant during the fabrication of the plant; and

utilize the plant application information during operation of the plant.

27. A system in accordance with Claim 25 wherein said server further configured to integrate the received information into a database.

28. A system in accordance with Claim 25 wherein said server further configured to collect monitored plant activity information.

29. A system in accordance with Claim 25 wherein said server further configured to track and provide notices regarding plant maintenance.

5 30. A system in accordance with Claim 25 wherein said server further configured to:

gather engineering data and information from multiple phases of the project;

10 utilize the gathered data and information to make decisions regarding operation and maintenance of the plant; and

assess needs and opportunities of the plant to improve the plant.

31. A system in accordance with Claim 25 wherein said server further configured to:

receive login information from the user;

15 receive a project selection from the user; and

determine a functionality available to the user and information the user can view based on a user level permission provided the user.

20 32. A system in accordance with Claim 25 wherein said server further configured to display a set of instrumentation and information associated with the instrumentation.

33. A system in accordance with Claim 25 wherein said server further configured to receive red-lined drawings from the user.

34. A system in accordance with Claim 25 wherein said server further configured to store project data on a server remote from the system.

25 35. A system in accordance with Claim 25 further configured to:

receive a site administration command; and

transmit a site administration page to the user for selection of one of an edit news block, an edit safety message block, an edit project team block, and an edit contact block.

5 36. A system in accordance with Claim 25 wherein said server further configured to receive application data from a team member.

 37. A system in accordance with Claim 25 wherein said server further configured to enable the user to view a screen including each component which is to be monitored or controlled.

10 38. A system in accordance with Claim 25 wherein said server further configured to limit access to the collected data in accordance with permissions given to the user.

 39. A system in accordance with Claim 25 further configured to enable the user to control a monitored device and access information pertaining to that device.

15 40. A system in accordance with Claim 25 wherein said server further configured to utilize the integrated data to monitor equipment for predictive failure, failure, and scheduled maintenance.

 41. A system in accordance with Claim 25 wherein said server further configured to page an appropriate person of a pending work order.

20 42. A system in accordance with Claim 41 wherein said server further configured to e-mail personnel the appropriate work order to complete the job.

 43. A system in accordance with Claim 41 wherein said server further configured to:

 identify at least one of a failure and a maintenance alarm;

25 identify a piece of equipment that generated the at least one of an equipment failure and an equipment maintenance alarm;

 identify a person responsible for the piece of equipment; and

send a page command to a page system so the identified person can be paged.

5 44. A system in accordance with Claim 25 wherein said server further configured to receive information pertaining to concept, scope, pre-engineering, detailed engineering, and construction of the plant.

45. A system in accordance with Claim 25 further configured to utilize the information for designing the plant.

46. A system in accordance with Claim 25 further configured to utilize the information for operating the plant.